Comparisons of Job Characteristics

Focus Occupation: Computer Systems Analysts (15-1051)
Associated Occupation: Network Systems and Data Communications Analysts (15-1081)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge — Similarity of Focus Occupation to Associated Occupation: 82

Focus Occupation: Computer Systems Analysts (15-1051)
Associated Occupation: Network Systems and Data Communications Analysts (15-1081)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Computers and Electronics	8.4	21.2	19.3	0	Current knowledge level may be sufficient
Telecommunications	3.9	17.4	6.8	<<	Extensive education and/or training may be required
Customer and Personal Service	11.3	13.4	15.4	>	Current knowledge level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills — Similarity of Focus Occupation to Associated Occupation: 76

Focus Occupation: Computer Systems Analysts (15-1051)
Associated Occupation: Network Systems and Data Communications Analysts (15-1081)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Systems Analysis	6.5	12.8	12.6	0	Current skill level may be sufficient
Operations Analysis	5.0	11.5	10.6	0	Current skill level may be sufficient
Systems Evaluation	6.4	11.5	12.7	>	Skill level is likely sufficient
Troubleshooting	4.5	10.3	8.9	<	A higher skill level may be required
Quality Control Analysis	5.9	10.0	10.3	0	Current skill level may be sufficient
Programming	2.2	9.6	10.2	0	Current skill level may be sufficient
Technology Design	2.6	9.1	9.7	0	Current skill level may be sufficient
Equipment Selection	3.3	8.5	5.5	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Abilities — Similarity of Focus Occupation to Associated Occupation: 98

Focus Occupation: Computer Systems Analysts (15-1051)
Associated Occupation: Network Systems and Data Communications Analysts (15-1081)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Deductive Reasoning	10.6	12.3	13.9	>	Current ability level is likely sufficient
Information Ordering	9.9	11.6	12.9	>	Current ability level is likely sufficient
Fluency of Ideas	7.6	9.7	12.7	>>	Current ability level is likely more than sufficient
Selective Attention	8.7	9.7	9.9	0	Current ability level may be sufficient
Originality	7.6	9.4	11.6	>	Current ability level is likely sufficient
Perceptual Speed	7.4	8.8	9.0	0	Current ability level may be sufficient
Speed of Closure	5.9	8.5	8.8	0	Current ability level may be sufficient
Memorization	5.6	7.3	7.3	0	Current ability level may be sufficient

The maximum possible rating is 25.

Activities that Both Occupations Have in Common — Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Computer Systems Analysts (15-1051)
Associated Occupation: Network Systems and Data Communications Analysts (15-1081)

Work Activities	Exclusivity of Activity
Adjust computer operation system	84
Communicate technical information	4
Consult with customers concerning needs	69
Evaluate computer system user requests or requirements	81
Follow data security procedures	77
Follow data storage procedures	75
Implement computer system changes	92
Maintain client-server database	89
Maintain or repair computers or related equipment	81
Monitor computer operation	85
Operate computer networks	92
Prepare technical reports or related documentation	22
Program computers using existing software	85
Program mainframe computer	84
Provide technical computer training	82
Provide technical support to computer users	80

Recommend software or hardware purchases	85
Resolve symbolic formulations in data processing applications	89
Select business applications for computers	89
Test computer programs or systems	78
Train workers in use of equipment	87
Use computer application flow charts	84
Use computer networking technology	81
Use computers to enter, access or retrieve data	3
Use knowledge of mainframe computers	78
Use project management techniques	47
Use spreadsheet software	18
Write computer software, programs, or code	84

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common	Similarity of Focus Occupation to Associated Occupation: 88

Focus Occupation: Computer Systems Analysts (15-1051)
Associated Occupation: Network Systems and Data Communications Analysts (15-1081)

Tools and Technologies	Exclusivity
Business function specific software	1
Computers	1
Content authoring and editing software	1
Content management software	6
Data management and query software	1
Development software	4
Educational or reference software	12
Finance accounting and enterprise resource planning ERP software	2
Industry specific software	1
Network applications software	1
Network management software	37
Networking software	21
Operating environment software	12
Personal communication devices	2
Security and protection software	30
Utility and device driver software	17

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.